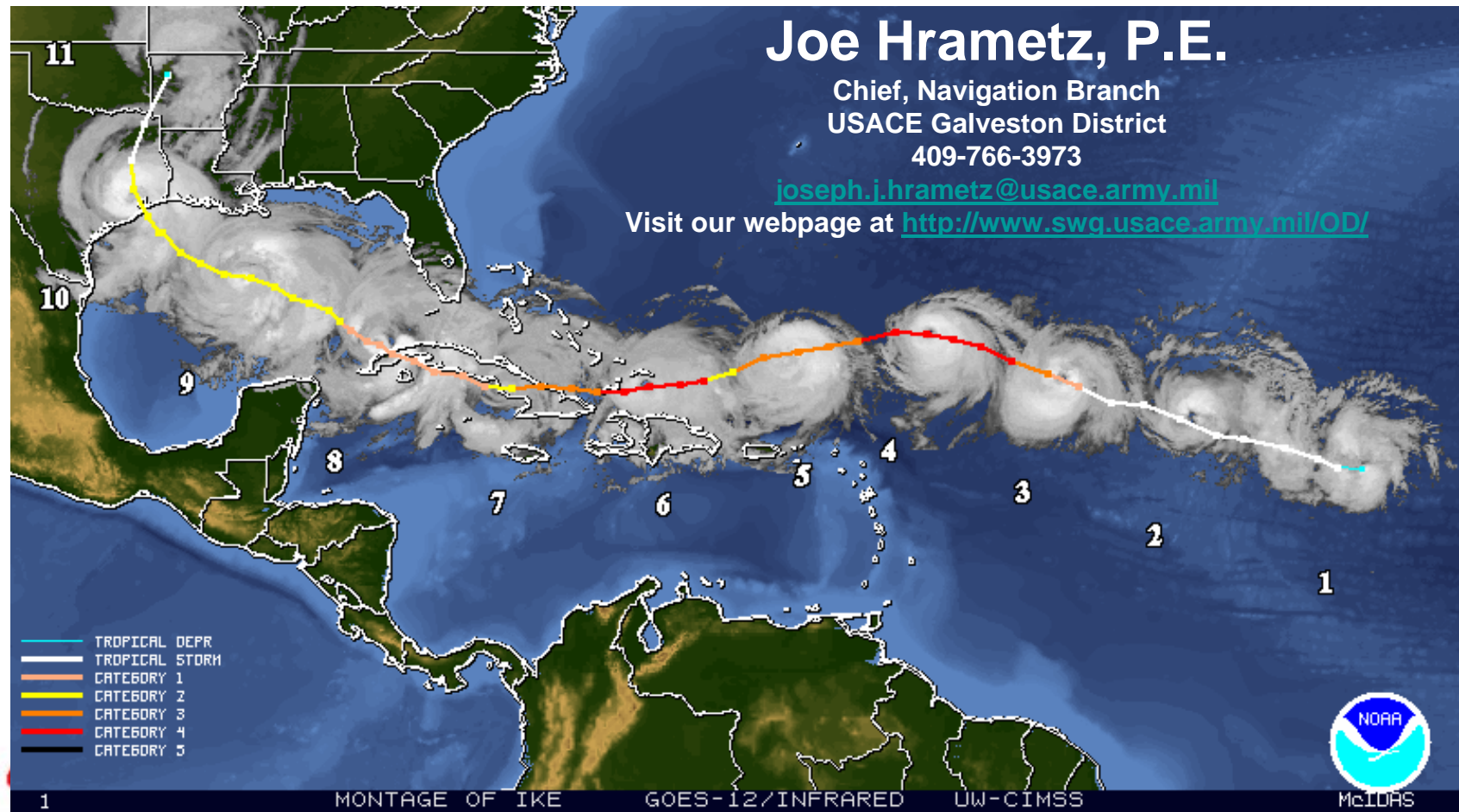




NATIONAL DREDGING TEAM MEETING

Emergency Contingency Planning

Hurricane IKE



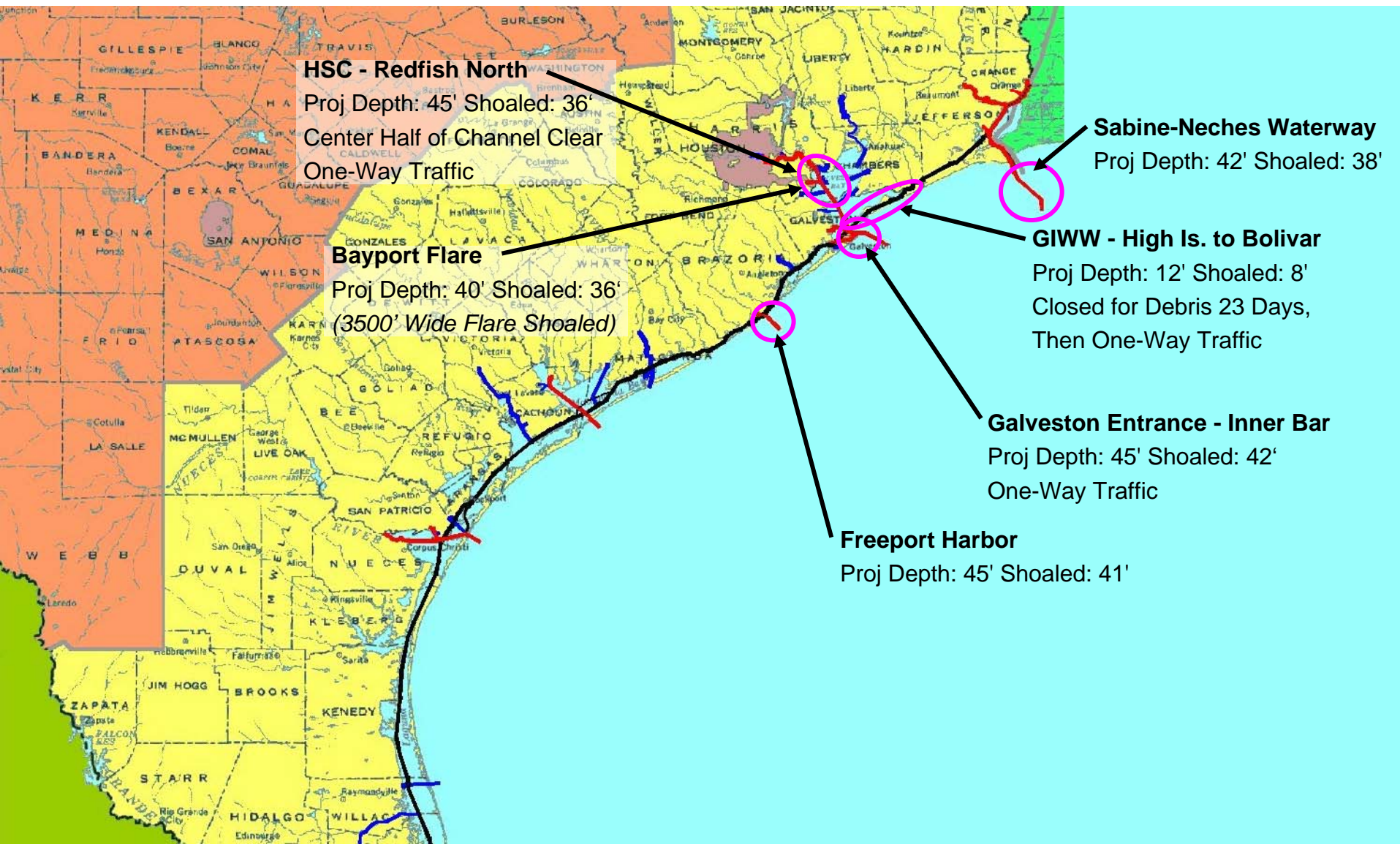


2008 HURRICANE DAMAGES.....

- Entire Texas coast impacted by 3 hurricanes and 1 tropical storms
- Damages estimated at \$261 M +++
- Hardest hit areas – Sabine, Houston Galveston Bay Complex, Freeport, GIWW- High Island to Bolivar



Channel Restrictions – Post Ike





LESSONS LEARNED: CREATIVE MANAGEMENT

Four main areas to address:

- Procurement method
- Dredging/Placement Areas
- Debris Removal
- Environmental coordination



Procurement Methods

- Modified existing dredging contracts
- Issued new dredging contracts
- Issued MIPR to U.S. Navy for Debris Removal
- Issue Multiple Award Contract (MATOC) to repair levees and erosion protection
- Issue architect engineering services contracts to develop plans and specifications for levee repairs
- Using contract capacity from Omaha District emergency rapid response contract to remove debris



DREDGING METHODS & PLACEMENT AREA PLANS

- Hopper dredge replaced pipeline dredge
- Beach nourishment vs. confined disposal
- Confined disposal vs. ocean disposal
- Coordinated pipeline routes



Debris Removal

- In the channel
- Inside Placement Areas
- Along the waterway
- Hazardous and toxic waste



ENVIRONMENTAL

Coordinate new placement plan taking into account:

- Grain size analysis & sediment testing
- Texas Commission on Environmental Quality chemical contamination concerns
- State Historic Preservation Officer concerns of possible historical shipwrecks
- USFWS concerns of piping plovers and nesting sea turtles
- Coordination with EPA for Ocean Dredge Material Disposal Site and testing to comply with Marine Protection Research & Sanctuary Act
- Coordination with NMFS for hopper dredging within sea turtle window



US Army Corps of Engineers



Crystal Beach, TX



US Army Corps of Engineers



September 9, 2008



Before & After Bolivar Peninsula

September 15, 2008





US Army Corps of Engineers



GIWW – High Island to Bolivar



Photo taken: 30 Sep 08 by LFS



PA 41
Debris on Levee



PA 40 Erosion on West Levee

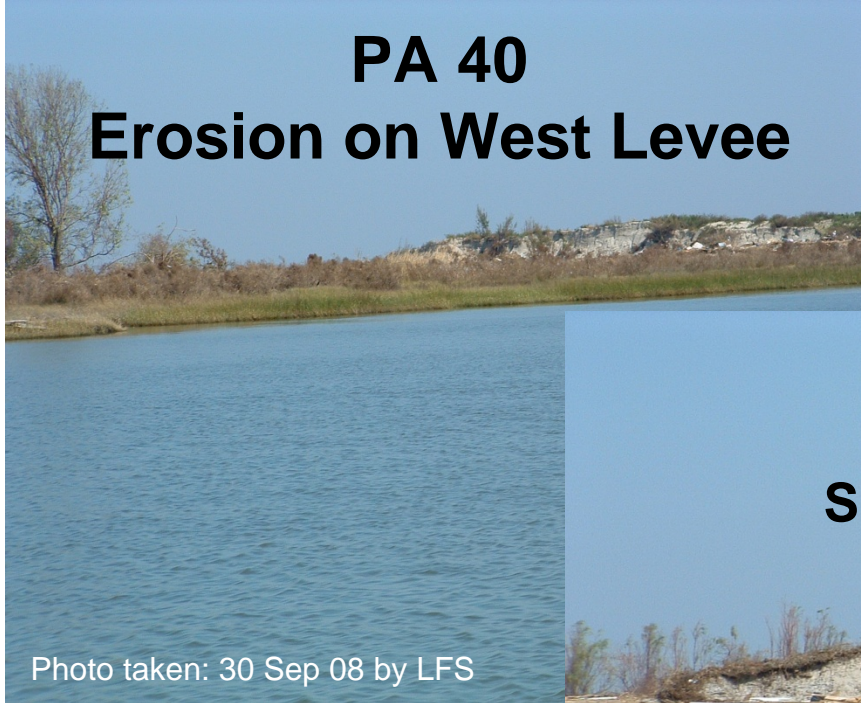
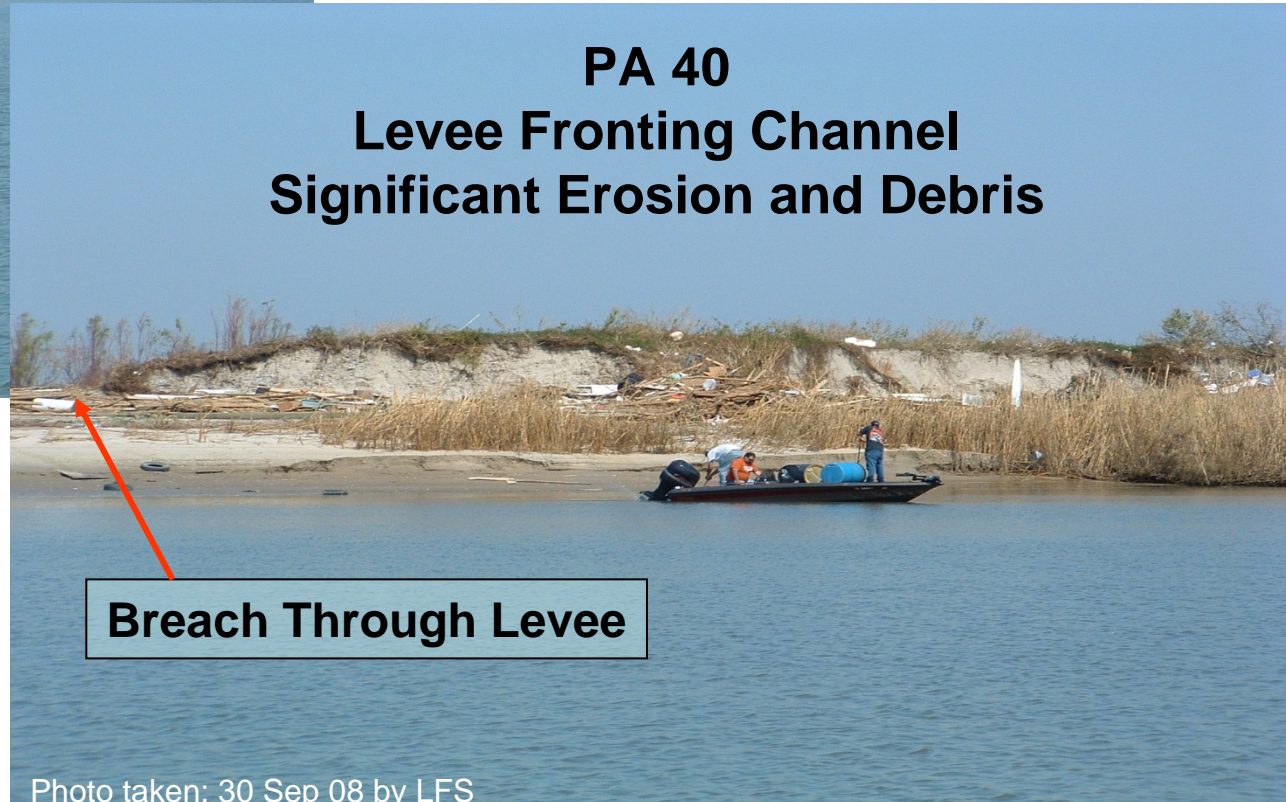


Photo taken: 30 Sep 08 by LFS

GIWW – High Island to Bolivar

PA 40 Levee Fronting Channel Significant Erosion and Debris



Breach Through Levee

Photo taken: 30 Sep 08 by LFS



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Photo taken: 30 Sep 08 by LFS



**PA 39
Shrimp Vessel &
Container on Levees**

GIWW – High Island to Bolivar

**Across PA 39
Car in Marsh**

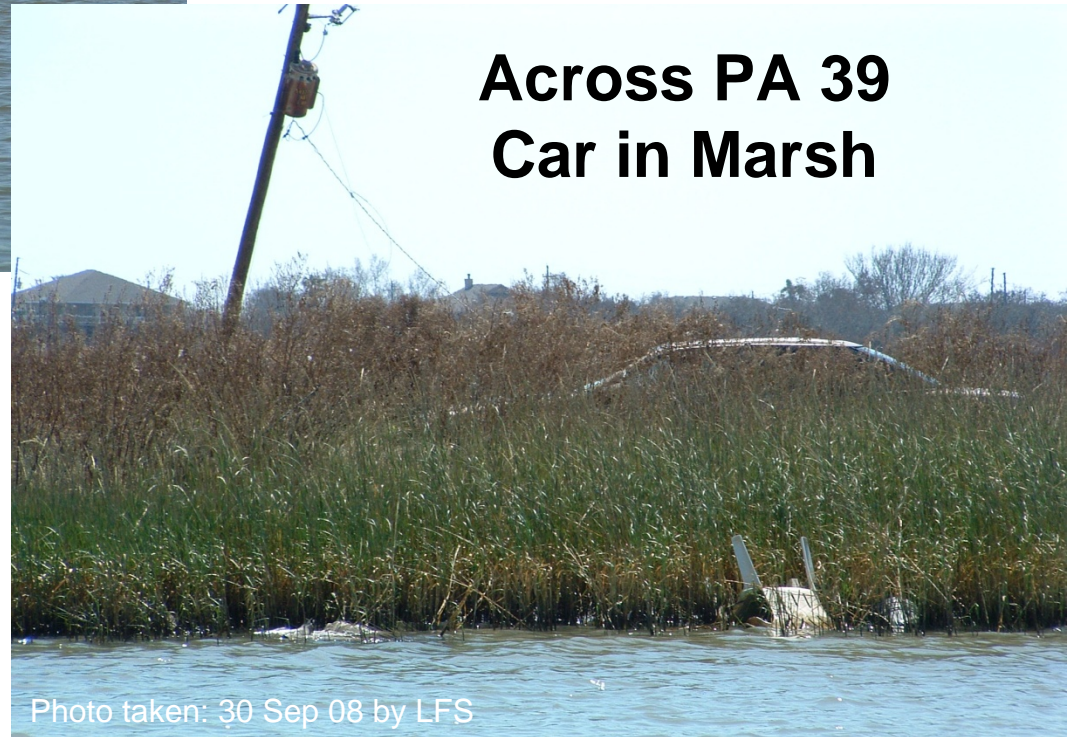


Photo taken: 30 Sep 08 by LFS

Galveston District

Custodians of the Coast



US Army Corps of Engineers



Photo taken: 30 Sep 08 by LFS

PA 39 Shrimp Vessel on Levees

GIWW – High Island to Bolivar

PA 38 Debris and House



Photo taken: 30 Sep 08 by LFS



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GIWW – High Island to Bolivar



Photo taken: 30 Sep 08 by LFS

PA 35
Levee Fronting Channel
Significant Erosion and ACM
Damage



Photo taken: 30 Sep 08 by LFS



Hurricane Ike – Placement Area #15

Houston Ship Channel PA-15

Picture 5

Levee and erosion of levee at station
0+00. Looking to the South.





HSC - Mid-Bay Placement Area





Sabine PA-8





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Sabine PA-8



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Sabine PA-8



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Sabine PA-11



Galveston District

Custodians of the Coast



PLANNING FOR THE NEXT “IKE”

- Partnering with the dredging industry to develop an emergency dredging MATOC contract
- Exchange lessons learned with other Corps coastal districts
- Continue to improve communication with our federal and state resource agencies
- Continue to value and develop our partnerships with sponsors, Coast Guard and waterway users
- Execute generic MOA's with sponsors to dredge emergency shoal at port docks

A photograph of Earth from space, showing the horizon and clouds. The text "questions - comments?" is overlaid in a large, yellow, stylized font with a blue outline.

**questions -
comments ?**